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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,285	02/25/2004	Anthony K. Lazzarini	030048111US	4003

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EXAMINER

HOGAN, JAMES SEAN

ART UNIT	PAPER NUMBER
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3752

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/786,285	Applicant(s) LAZZARINI, ANTHONY K.	
	Examiner James S. Hogan	Art Unit 3752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☒ Claim(s) 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 02/25/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claim 14 is objected to under 37 CFR 1.75(d), as being of improper for failing to conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The specification does not support corresponding language for actuating a first portion of fire-suppressant over a first period of time without any mention of a rate at which the suppressant is released. A first rate would be necessary to accomplish for any rational comparison to any subsequent rates of release of suppressant in later discharges as claimed.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the process of actuating a first portion of fire-suppressant over a first period of time without any mention of a rate at which the suppressant is released is indefinite. A first rate would be necessary to accomplish for

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any rational comparison to any subsequent rates of release of suppressant in later discharges as claimed.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8 and 14-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Investigation Update Into the Fire on Board Air Canada Flight 116 as reported on <http://www.iasa.com.au/folders/menu/index.htm> (International Aviation Safety Association, established by Mrs. Lyn S Romano March 4, 1999), report dated May 24, 2002, incident dated May 13, 2002, Investigation Number A02O0123. Its investigation number in the following will refer to the report, for clarification purposes.

Referring to claims 1, 14, 20, 25 and 27 'A02O0123 discloses an incident involving a fire in a cargo bay of a Boeing 767 –300 airplane where upon detection of a fire (page 1) three fire suppressant vessels were discharged in a sequential order through manifold pressures switches (i.e. flow control devices or valves, as per claims 15, 24, 26, 28, 34, and 35) at the initiation of a controller (see i.e. discharge indication circuit) and necessary conduits in order to combat a fire in a cargo bay. Further, as best as can be reasonably determined, known valves were arranged (see diagram of apparatus, page 11 of the attached report) thus that during the initiation of the fire-suppressing system, a first rate of suppressant from bottle no. 1 was released to “knock down” the fire. Secondly, a second discharge, by two additional suppressant-containing

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bottles (bottles 2 and 2a, thus, making at least three pressurized containers, as per claims 2, 18, 19, and 21) released a second discharge of suppressant at a lower concentration of suppressant, therefore a lower than initial rate. Lastly, the bottles were "rigged" (page 8, line 1) to wholly discharge any leftover suppressant upon landing (i.e. during descent) the airplane, thus creating a third discharge at a third rate, being higher than the second rate of discharge. As per claim 3, 16, and 22 the suppressant disclosed is Halon. As per claim 4 and 26, as previously stated, three separate discharging rates are disclosed, thus, three different valve arrangements to provide a rate of discharge existed. As per claim 6, the time at which the third rate of discharge is performed is an immediate release of suppressant, thus at a period of time less than the "sustaining" second release of suppressant. As per claims 7 and 17, the third release of suppressant is released upon landing (i.e. during descent). As per claim 8, 23, 29, 30 and 31, the second discharge rate was disclosed as providing an ongoing concentration of suppressant in the cargo hold for 195 minutes and upon landing (i.e. during descent) the systems was "rigged" to discharge remaining suppressant at a third rate, at a instantaneous third period time, obviously less than the second period of time.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Investigation Update Into the Fire on Board Air Canada Flight 116 as reported on <http://www.iasa.com.au/folders/menu/index.htm> (International Aviation Safety Association, established by Mrs. Lyn S Romano March 4, 1999), report dated May 24, 2002, incident dated May 13, 2002, Investigation Number A02O0123. Its investigation number in the following will refer to the report, for clarification purposes.

As per claims 9 and 10, A02O0123 teaches where an incident involving a fire in a cargo bay of a Boeing 767 –300 airplane where, upon detection of a fire (page 1), three fire suppressant vessels containing Halon, (as per claim 11) were discharged in a sequential order through manifold pressures switches (i.e. flow control devices or valves) at the initiation of a controller (see i.e. discharge indication circuit, as per claim 13) and necessary conduits in order to combat a fire in a cargo bay. Further, as best as can be reasonably determined, known valves were arranged (see diagram of apparatus, page 11 of the attached report) thus that during the initiation of the fire-suppressing system, a first rate of suppressant from bottle no. 1 was released to “knock down” the fire. Secondly, a second discharge, by two additional suppressant-containing bottles (bottles 2 and 2a, thus, making at least three pressurized containers) released a second discharge of suppressant. A02O0123 does not teach the second discharge rate being greater than the initial release of suppressant. However, in the likelihood that an initial release of would not have suppressed the fire as reported, it is recognized that increasing the rate of release during a second discharge compared to an initial release, would be within the scope of one of ordinary skilled in the art and therefore obvious.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is as follows:

U.S. Patent No. 4,643,260 to Miller, disclosing a fire suppression system

U.S. Patent No. 4,646,848 to Bruensicke, disclosing a fire suppression system

U.S. Patent No. 5,038,867 to Hindrichs et al., disclosing a fire suppression system

U.S. Patent No. 5,052,493 to Court, disclosing a fire suppression system

U.S. Patent No. Application No. 2005/0150663 to Fabre et al., disclosing a fire suppression system


Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Hogan whose telephone number is (571) 272-4902. The examiner can normally be reached on Mon-Fri, 7:00a-4:00p EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Scherbel can be reached on (571) 272-4919. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

08/01/2005
JSH



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